

ASBESTOS



Quinterra Paper — a unique Asbestos Product

MARCH - 1949

VERSATILITY

A botanist tells us there are some 340,000 species of plants. Of these, trees live the longest, some being thought to attain the ripe old age of five thousand years.

- Raybestos-Manhattan cannot claim quite so many different products, nor guarantee quite such length of service. Yet the variety of asbestos textiles produced at the different R/M plants is unusually large. In fact the uses to which they are put are too many to catalog. Their ability to provide long service under rigorous conditions has been demonstrated over and over again.

RAYBESTOS-MANHATTAN, INC.

Asbestos Textile Division • Manheim, Pa.

Factories: Manheim, Pa.; No. Charleston, S. C.



RAYBESTOS-MANHATTAN, INC., Manufacturers of Asbestos Textiles
Packings • Mechanical Rubber Products • Abrasive and Diamond Wheels
Brake Linings • Brake Blocks • Clutch Facings • Fan Belts • Radiator Hose
Rubber Covered Equipment • Powdered Metal Products • Bowling Balls

"ASBESTOS"

FOUNDED IN JULY 1919 AND PUBLISHED
MONTHLY SINCE THAT DATE
BY SECRETARIAL SERVICE
17th FLOOR INQUIRER BUILDING
PHILADELPHIA, 30, PENNSYLVANIA

Estate of C. J. STOVER, Proprietor
A. S. ROSSITER, Editor
E. E. COX, Circulation Manager

Entered As Second Class Matter November 23, 1923, at the Post
Office at Philadelphia, Pennsylvania, Under Act of March 3, 1879

Volume 30

MARCH 1949

Number 9

Editorials

The Wood Chuck	2
The Choo-Choos and the Strike	2
Gadget Needed	3
ASBESTOS — AN ELUSIVE MINERAL— By Oliver Bowles	4
Misinterpretation	10
Oven Insulation Solves a Problem	12
Strength of Rope	14
Asbestos-Cement Again Foils Fire — <i>A Service Tale</i>	16
New Thermoflex Insulation Blanket	18
Asbestos Wick in Exhaust Hose	20
ASBESTOS PRODUCTION — Cyprus	22
Automobile Sales	27
MARKET CONDITIONS	28
Canadian Production — 1898 to 1948	31
Production Statistics	32
Building	32
Imports and Exports	34
NEWS OF THE INDUSTRY	38
Patents	48
Asbestos Stock Quotations	49
Afterthoughts	50
Current Range of Price	52
Uses of Asbestos Paper	52

ASBESTOS is indexed regularly by Engineering Index, Inc.

SUBSCRIPTION PRICE

UNITED STATES	- - - - -	\$2.00	PER YEAR
CANADA	- - - - -	3.00	" "
FOREIGN COUNTRIES	- - - - -	3.00	" "
SINGLE COPIES (Current)	- - - - -	.25	EACH
BACK COPIES	- - - - -	.35	EACH

(Payable in U. S. Funds)

Copyright 1949, Maud M. Stover, Executrix, Estate of C. J. Stover

THE WOOD CHUCK

Glancing over figures for shipments of Canadian fibres, we notice that the shipments of shorts during any given period far exceeds that of the shingle grades.

At first glance this would imply that the demand for shorts was, and is, far greater than for the shingle fibres.

This makes us wonder whether shipments of shingle grades would have equalled or surpassed those of shorts if the manufacturers using the shingle grades could have gotten *all* they wanted when the shortage was most acute (it has eased somewhat recently).

Users of shingle grades at that time were taking every pound produced and no manufacturer was getting sufficient material to allow him to produce to capacity or to adequately fill his orders for the manufactured products. The producers of shingle grades tried to allocate their production as equitably as possible, but there was a continual cry for "more" and "more".

The discussion is purely academic, of course; probably no manufacturer can figure how much fibre he would have used if he had gotten all he needed, but if all manufacturers of asbestos-cement products and of other materials using shingle grades, could have purchased freely, would the shipments of shingle grades have equalled or exceeded the shipments of shorts?

It reminds us of the old query about the woodchuck—How much wood would a woodchuck chuck if a woodchuck would chuck wood?

THE CHOO-CHOOS AND THE STRIKE

Philadelphia has been afflicted with a transportation strike—most uncomfortable for everyone. Your editor, who lives about 20 miles outside the city uses a train to get to the office, but during the strike they took the electric trains to run shuttles which go back and forth quickly between Philadelphia and nearby stations, to accommodate those who formerly used trolleys, subways and buses. That left the steam trains for those commuting from more distant points.

One morning during the strike (a beautiful morning) I stood at the station—a small station by the name of Penllyn—and watched with amusement the steam train pull in. It chugged in slowly but with an air of determination to get there, and disdainfully, as tho it had no intention of stopping to take on the half dozen passengers waiting. Finally, however, it condescended to stop, everybody clambered on, then off it chugged, rather majestically with smoke plumes waving. At each station it stops with a bang, and then starts with a jerk which is likely to throw you off your feet if you haven't yet gotten seated.

Despite the fact that it starts six minutes earlier, it arrives at Reading Terminal about 20 minutes later than the electries did formerly. It gives plenty of time for reading, but at night, having spent a good hour on the train (the electries took 40 minutes) you feel as tho you had been on a long journey.

The strike has now been called off, but the effects of it were far reaching and the small increase in wage gained by the workers will never repay for all the trouble caused. We hope some day workers and Union leaders will realize that strikes do not pay, especially when they inconvenience so many thousands of people. No one group has the moral right to cause so many thousands of people inconvenience, injury and actual economic loss.

GADGET NEEDED

One of our readers has a problem—can someone help him?

In his insulation contracting work, he has been having trouble with screw heads pulling thru insulation. He has tried a number of things, the latest being the use of roofing caps which he says require considerable labor to punch large enough to receive a screw.

Is there anything made to prevent the screw heads pulling thru the insulation material? And if so who makes it? Or how do other insulation contractors overcome the difficulty? We shall publish in our next issue any answers received, so that all may benefit.

ASBESTOS - AN ELUSIVE MINERAL

By Oliver Bowles, Consultant on Nonmetallic Minerals

Insofar as chrysotile asbestos is concerned the United States is emphatically a have-not nation. We produce not more than 4 to 6 percent of our requirements. Fortunately nearby Canada has been a source of inestimable value, but substantial quantities are also received from far-off Africa. For more than 30 years during which I have devoted considerable study to asbestos I have entertained a fond hope that I might be instrumental, or at least might witness the development of a major deposit of this commodity within the borders of the United States, but up to the present time such hope has not been realized. In the vicinity of Eden, Vt., is the only large producing area in the country and it has been known for many years. Arizona likewise has been known as a producer for a long time, but even the urgency of war demands failed to stimulate an output of more than a few hundred tons a year from that source.

During the many years that I was engaged as a specialist on nonmetallic minerals in the Bureau of Mines, samples of asbestos were received from numerous locations. Many of them proved to be amphibole asbestos for which the market has always been quite limited. Others were of such poor quality that they bore no promise of practical use. Still others were of good quality, and hopes were entertained that deposits of some magnitude might be represented by them. None of them, however, led to noteworthy developments. An exasperating circumstance was the abundance of information generally available concerning inferior samples, and the sparsity of data obtainable on the most promising specimens. Many of the poorer samples were accompanied by lengthy reports, verbal or written, on the locations of the deposits, their extent, purity, ease of working, etc., but rarely was any worthwhile information supplied for the better samples. Time after time samples of crude fibre of good quality an inch or more in length were received, and when inquiries were sent as to locations and



AFD

ASBESTOS FIBRE DIVISION
Canadian Johns-Manville Limited

814 Sun Life Bldg. (Telephone: Marquette 2421) Montreal, P. Q., Canada

extent of deposits no answer was forthcoming. I found myself at a standstill in a blind alley.

Some of the samples sent in were obviously misleading. A specimen sent from a location in the far Southwest was an amber silky fibre so characteristically the Arizona type that it almost certainly had been obtained in Arizona originally. At another time a beautiful sample of green crude chrysotile having fibres 1-1/2 inches long was mailed from a southern point and accompanied by a statement that it represented a large deposit. The material was later identified as an identical specimen of Canadian fibre that had been given to the party who sent the communication.

On another occasion two men called upon me to discuss development of a serpentine marble (*verde antique*) deposit somewhere in Michigan. Apparently they had no knowledge of the relation of asbestos to serpentine, but they volunteered the information that they had found in places a peculiar rock resembling bits of rope. I was immediately interested because the serpentine association strongly suggested the presence of asbestos. They agreed to search for samples that they thought were available and send them to me, but none was ever received. Follow-up inquiries regarding several samples of good quality brought information indicating that the deposits represented were too small for commercial development, but it is quite possible that the deposits had not been adequately explored. These few examples illustrate the inconclusive or negative results of numerous investigations.

Chrysotile occurrences are not uncommon. Small stringers of asbestos occur in the Bare Hills serpentine near Baltimore, Md., and in massive serpentine along the Potomac River in Virginia. Occurrences have been reported in New York, Montana, Oregon, in many places in California, and in various other States, but to date not one of them except those in Vermont and Arizona has proved to be of commercial importance. With the exception of the Arizona deposits that occur in dolomitic limestone, and are, on this account, unique on the

PIONEERS IN ASBESTOS

for every
purpose



Keasbey & Mattison—
original manufacturers of
asbestos-cement roofing shingles in this
country—produce a complete line of asbestos
building materials: Siding and Roofing
Shingles • Wallboards • Corrugated and
Flat Lumber • Acoustical material.

For Industry, we offer the following all-
purpose asbestos products: Asbestos and
Magnesia Pipe and Block Insulations • As-
bestos Electrical Materials • Packings •
Textiles • Paper and Millboard • Marine
Insulations.

And for the efficient conveyance of
water, we manufacture "Century" Asbes-
tos-Cement Pipe.

*Nature
made Asbestos...*

*Keasbey & Mattison
has been making it serve
mankind since 1873*



**KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA**

American continent, chrysotile occurs invariably in massive serpentine that is an alteration product of ultra-basic igneous rocks such as dunites consisting essentially of olivine.

The process of alteration of the olivine presents one peculiar problem which no one has yet ventured to explain. In northern areas including Quebec, Canada, Newfoundland and in Vermont and some other States the olivine has been altered to massive serpentine and chrysotile asbestos with talc appears in places as at Gouverneur, N. Y., and Johnson, Vt. However, south of the Mason-Dixon line the alteration products are serpentine, soapstone, talc, greenstone, and amphibole asbestos. Rarely is chrysotile found in Southern States, altho basic igneous rocks similar to those from which the Canadian fibers are derived occur widely. What influences have discouraged chrysotile development in the South? Here is a problem for some alert and aspiring geologist to solve for his Doctor's thesis.

At this critical period much attention is directed to our mineral requirements and our degree of self-sufficiency. Stock piles of strategic minerals including asbestos are being accumulated in readiness for any emergency. In view of our extreme dependence upon foreign supplies of asbestos, is not this an opportune time to make a more complete inventory of our domestic reserves? A systematic study of all known chrysotile deposits and all serpentine areas is urgently needed. The problem offers a challenge to State and Federal geologic and mining agencies. No noteworthy asbestos discoveries in the United States are to be attributed to the geologists, prospectors or miners. The Eden, Vt., deposit is said to have been discovered by a woodsman while cutting timber on Belvidere Mountain, and the Arizona deposits were, according to report, first found by a soldier during a battle with a band of Indians. The reputation of the geologists and miners is surely at stake. Can we find no commercial asbestos deposits except those that individuals untutored in geology and inexperienced in mining and prospecting may stumble upon by accident? Here is

Carey ASBESTOS

Since 1873 Carey has been manufacturing products of which asbestos is an integral part.

And Carey research is constantly working to make those products work better and to develop new products which will utilize the outstanding qualities of asbestos.

THE Carey LINE INCLUDES

- Asbestos Corrugated Roofing and Siding
- Asbestos Fibre and Specialties
- Asbestos Flat Sheathing
- Asbestos Heat Insulations and Cements
- Asbestos Packing • Asbestos Roofing Felts
- Asbestos Paper and Millboard
- Asbestos Prefabricated Ducts
- Asbestos Shingles and Siding
- Asbestos Wallboard

THE PHILIP CAREY MANUFACTURING CO.
Cincinnati 15, Ohio

In Canada: The Philip Carey Co., Ltd., 1557 MacKay Street, Montreal 1, P. Q.

an opportunity for geologists and geophysicists to take steps toward making our country less dependent upon foreign supplies of this essential mineral.

Perhaps there are no large undiscovered deposits of chrysotile asbestos, but there seems to be no available evidence that a thorough study of known deposits has ever been made or that known serpentine deposits have been adequately prospected. A more intensive and systematic search for this elusive mineral might in time give us a less discouraging picture of the domestic asbestos situation than now appears.

MISINTERPRETATION

In some newspaper, probably Canadian or Canadian Government report there appeared the following:

Ottawa.—Producer's shipments of asbestos paper stocks in November, 1948, advanced to 9,206 tons compared with 6,808 tons in the same month of the preceding year and increased to a total of 77,854 tons in the first eleven months of 1948 as against 75,442 tons a year ago in the same period.

Anyone familiar with asbestos and asbestos terminology knows that this refers to stocks of asbestos *fibre* of the grade used for the manufacture of asbestos paper and millboard but one of the paper journals printed the item with the heading "More Asbestos Paper."

An eight-inch pipe of asbestos-cement has been used to line 140 feet of a 240-foot well on a Wisconsin farm. The installation was termed highly successful by the driller of the well.

The 18th National Packaging Exposition will be held in the Public Auditorium at Atlantic City, N. J., May 10th to 13th, 1949. The exhibit will occupy 110,000 square feet of floor space.

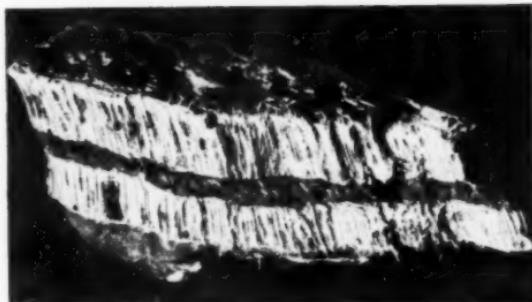
The whole secret of life is to be interested in one thing profoundly and in a thousand things well.

—Hugh Walpole



Vermont To You!

ASBESTOS



From America's Largest Asbestos Mines

VERMONT ASBESTOS MINES

Division of

The RUBEROID Co.

Hyde Park, Vt.

Mines at Eden and Lowell

Sales Offices: 500 Fifth Ave., New York 18, N. Y.

OVEN INSULATION SOLVES A PROBLEM

An Installation Story

Seeking to reduce cooking costs by the substitution of butane bottled gas instead of electricity, The Tasty Shop, a small wholesale bakery in Palatka, Fla., purchased a war surplus Blodgett four tier capacity baking oven.

When the oven was put in operation, such a heat loss developed that it was impossible to touch the sides of the oven when the three burners were lighted. In addition, with all three burners turned on full, the oven temperature would not go over 400 deg. F.

Insulation seemed to be the proper cure for the situation and insulating cement (Carey MW-50), was chosen. The reasons for its selection were the manufacturer's claim that it could be applied easily and rapidly by anyone; that it would adhere to any surface; that it would be economical and do the required job.

One hundred pounds (two 50-lb. bags) covered fifty-one square feet of oven (three sides and the top) with a $\frac{3}{4}$ " to 1" coating of the material. Mixing the cement with water and applying it with a trowel, took a little less than two hours and the total cost of the material was \$11.50.

It took about five days for the insulation to completely dry out and the oven was used during the drying period. Each day during this drying process the oven thermometer continued to show an increase in temperature.

When completely dry, it was found that by using this insulating cement the oven temperature could be raised to 530 deg. F., with three burners operating, or a gain of 130 degrees. In addition the insulation made it possible to turn out one burner completely as soon as the oven reached the desired temperature, as it held the heat longer and gave all four shelves better heat distribution.

By following the manufacturer's directions and leaving a rough finish a perfect insulating job was

UNION ASBESTOS

MEANS PROGRESS IN INSULATIONS, PACKINGS AND TEXTILES

AND RUBBER CO.

Unibestos Pipe Covering and Blocks

Amosite Woven Felts

Asbestos Packings and Gaskets

Asbestos Textiles

Processed and crude Amosite Fibres

Insutape spiral pipe insulation

Wovenstone pipe insulation

Insutube and Thermotube pipe and tube
insulation

Tailored Insulations for turbines, exhaust
manifolds, etc.

For Details Write:

UNION ASBESTOS & RUBBER CO.

Offices: Chicago 4, New York 17, San Francisco 5, Davidson, N. C.

Plants: Cicero 50, Ill., Blue Island, Ill., Paterson 4, N. J.

Earville, Ill., Davidson, N. C., Marshville, N. C.

secured, and when dry the material did not rub off. There were no cracks after complete drying and hardly any shrinkage. No wire screen, metal anchors or other reinforcements were used, nor was it necessary to cover with canvas. It covers corners, cracks and joints quickly and easily.

The manufacturer claims, thru independent laboratory tests, that one square foot at 400 deg. F., insulated with this insulating cement in one inch thickness, will save approximately eight million b. t. u. per year. The entire cost of the material and application in this instance should pay for itself in 30 days, thru savings in fuel.

STRENGTH OF ROPE -

Hemp, Cotton or Steel.

By W. F. Schaphorst, M. E.

Most users of rope and steel cable do not know the relationship between the size of rope and its strength. Therefore the following rules will probably be welcomed:

For cotton or hemp rope square the diameter of the rope in inches and multiply the product by 200. Thus for a half inch rope we have $\frac{1}{2} \times \frac{1}{2} \times 200$ or 50 pounds, which is the safe strength.

For steel cable square the diameter of the cable in inches and multiply by 12,000. Thus for a half inch cable we have $\frac{1}{2} \times \frac{1}{2} \times 12,000$ or 3,000 pounds, which is the safe strength.

The latter rule should not be applied to iron rope. Iron rope is not as strong as steel rope.

Bruce L. Wilson has been appointed Chief of the Engineering Mechanics Section of the National Bureau of Standards. In this capacity he will direct research on structural elements and metal structures to determine their strength, deformation under load, and other mechanical properties and will correlate the results with the theory of elastic and inelastic behavior of materials.

ASBESTOS

ASBESTOS

CORPORATION

LIMITED

THETFORD MINES

QUEBEC

CANADA

REPRESENTATIVES

GREAT BRITAIN: W. A. JANITCH,
6 Maresfield Gardens, London, N. W. 3

U. S. A.:

BALTIMORE, MD.: WALLACE & GALE CO.,
115 South Gay St.

CLEVELAND, OHIO: WORLD'S PRODUCTS TRADING CO.,
Rockefeller Bldg.

CHICAGO, ILL.: THE STARKIE COMPANY
5461 W. Division St.

NEW YORK, N. Y.: WHITTAKER, CLARK & DANIELS, INC.,
260 West Broadway

SAN FRANCISCO, CAL.: L. H. BUTCHER CO.,
15th and Vermont Sts.

CANADA:

MONTREAL, QUE.: ATLAS ASBESTOS CO., LTD.
110 McGill St.

TORONTO 1, ONT.: CANADIAN ASBESTOS ONTARIO LTD.
27 Front St., East

ASBESTOS-CEMENT AGAIN FOILS FIRE

A Service Tale

Corrugated asbestos-cement sheathing saved the plant of the Buffalo-Springfield Roller Co., when a building just four feet away, owned by the International Steel Wool Corporation, burned completely. The picture shows the wreckage with the asbestos-cement covered plant in the background.

All this happened at Springfield, Ohio, early in the morning of September 18th. The fire was caused by steel wool saturated with oil igniting, and the fire was fanned by fall winds until the building was a raging inferno and



the structural I-beams a gutted mass.

Officials of the Buffalo-Springfield Roller Co. imagined their building in ruins, but at dawn found the corrugated asbestos-cement roofing and siding only scorched and the equipment inside undamaged. Full scale production was maintained.

The corrugated asbestos-cement siding was Carey-stone, made by the Philip Carey Mfg. Company. This is certainly proof of its fire resistant qualities.

PHILLIPS ASBESTOS MINES

Producers of

CRUDES

and

Fiberized Asbestos

The World's Finest Fibre



DRAWER 71

GLOBE, ARIZONA

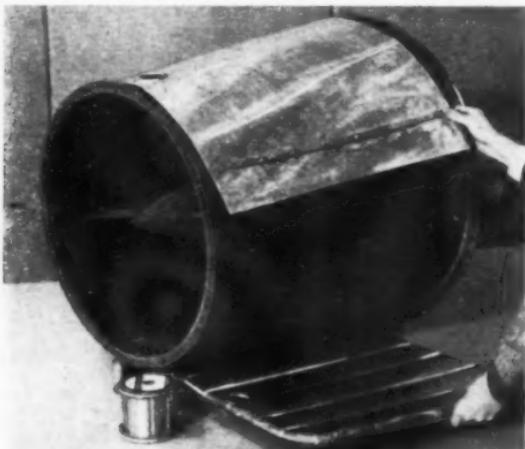
Mines and Mills in Gila Co., Arizona

NEW THERMOFLEX INSULATION BLANKET FOR JET AIRCRAFT

A new Thermoflex Insulation Blanket for jet aircraft and guided missile use has been developed by Johns-Manville. It is composed of an asbestos fibre pad, fully sealed within metal foil; is custom made in thicknesses of $\frac{1}{2}$ " and up.

The weight can be as little as 0.30 lb. per square foot, such light weight being made possible by a new Johns-Manville method of processing the amosite asbestos fibres into felts. Furthermore, the new blanket will not only withstand the temperatures encountered in current jet engines but has the resistance called for in future designs now being proposed.

Protection against the fire hazard from the absorption of fuel, lubricating oil or hydraulic fluid is provided



A Thermoflex Insulating Blanket being applied to the exhaust cone of a jet engine.

for by fully sealing the asbestos felts, sealing being accomplished thru a specially devised method of seam-welding very thin (0.002") Inconel or Stainless Steel foils which enclose the felts. The inner or hot side is grooved so the blanket is very flexible and will conform

ASBESTOS-CEMENT ASSOCIATES
INCORPORATED
CORIELL BUILDING MILLINGTON, N. J.
ENGINEERING SERVICE
TO THE ASBESTOS - CEMENT INDUSTRY
SPECIALISTS IN HATSCHEK OPERATION
COMPLETE PLANTS DESIGNED AND EQUIPPED
CONSULTING SERVICE ON MANUFACTURING PROBLEMS

WET MACHINE FELTS
FOR
ASBESTOS CEMENT PRODUCTS
ASBESTOS MILL BOARD

•

DRYCOR FELT COMPANY
STAFFORDVILLE, CONN., U. S. A.

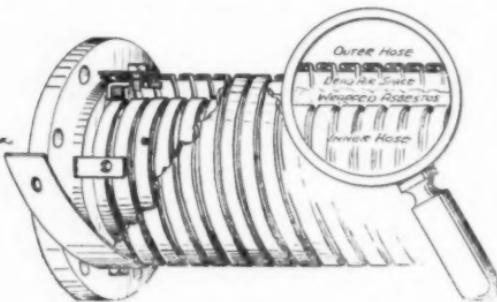
to curved as well as straight surfaces. The outer or cold side is a smooth, continuous surface of seam-welded sheets and, since this side is exposed to most of the wear during inspection and servicing, it is protected by a fine mesh screen of monel metal.

Suggested uses include jet engine tail pipes, exhaust cones and turbine castings; valves, pumps, reservoirs or fuel lines in the hot zone of jet aircraft; cabin air heating or anti-icing system heat exchangers and the protection of the fuel storage in guided missiles.

ASBESTOS WICK IN EXHAUST HOSE

A flexible exhaust hose for use on diesel engine exhausts is made and described by the Atlantic Metal Hose Co. of New York City in its Bulletin 10-C.

They call it double insulated because it is provided with a dead air space rather than a free flow of air, and has "wrapped asbestos" ($\frac{1}{4}$ " asbestos wick packing) between the inner and outer hose—see illustration.



This type of hose is designed to retain the heat equalizing the stresses from expansion and contraction and at the same time hold down the external temperature.

If interested in further details write the manufacturers at 123 W. 64th St., New York 23, for this Bulletin 10-C.

They also use untreated asbestos cord in various cuts and ply as a filling to provide for pressure tightness of flexible metal hose.



HAIR FELT

FOR

Low Temperature Insulation

Newark Hair Felt Co.
1000 Maple Avenue
Lansdale, Penna.

ASBESTOS PRODUCTION

VIII. Cyprus

Our record of production in Cyprus begins in 1906. It appears to have been known in ancient times by the Greeks and Romans¹, but the first reference to it which we can find among our records is in Cirkel's "Chrysoile Asbestos" which takes the information from the report of the High Commissioner for Cyrus for 1908-9.

This reference by Cirkel is quite interesting—we quote it exactly in the following:

"The Cyprian Mining Company—an Austrian corporation with a capital of about 400,000 crowns (about £16,700) has been formed to exploit the deposits at Troodos, Cyprus, which are stated to be very extensive. The Company have secured important concessions and mining rights from the Cyprian government, and have already begun work on a limited scale. A first consignment of about 30 tons found a ready sale at good prices, the asbestos being of good quality, and this will improve as the mine is opened up.

"Under the terms of their license from the Government, the Company were bound to export within the first year of their operations, a minimum of 75 tons of asbestos. Up to March 1, 1909, they had exported 457 tons, on which a royalty of 10% was paid to the Government.

"The Company have expressed themselves as well satisfied with the result of their prospecting and preliminary operations; further importations of machinery are being made, and there is every prospect of a very extensive business being carried on. Their success has given a great impetus to the prospecting for minerals, and 57 prospecting licenses were issued during the year to persons in search of copper, asbestos, magnesite, coal and similar deposits."

In a report on "Asbestos" by the Mineral Resources Department of the Imperial Institute, London, published in 1937, we find this account of the asbestos industry in Cyprus:

"The occurrence of asbestos in Cyprus was known to the ancient Greeks and Romans¹, who are believed to have used it for making winding-sheets for cremations and for lamp-wicks. This was probably a long fibre amphibole variety, but the im-

¹F. W. Kukula, Manager of the Cyprus Asbestos Mines since 1923, refutes this statement. See article in June 1926 "ASBESTOS", page 18.

ASBESTOS

Canadian

South African

Rhodesian



RAW ASBESTOS DEPARTMENT

Turner & Newall Limited

ROCHDALE • ENGLAND

portant deposits which have been exploited on the island in more modern times are of chrysotile.

"The mines are situated at an elevation of nearly 5000 ft. near Amiandos in the Troodos Range, and the serpentine mass in which the asbestos is found occupies the center of a circular intrusive boss of ultrabasic rocks. The core of the mass is serpentinized peridotite, and proceeding towards the periphery this is succeeded by zones of enstatite-peridotite, pyroxenite and gaboro, the latter being in contact with the country rock which is diabase.

"The chrysotile occurs in ribbon-veins which are most abundantly developed in zones of shearing and, altho widely distributed, the asbestos fibres are always short, ranging up to about $\frac{1}{2}$ in.

"Mining commenced in 1907 and was in the hands of an Austrian Company until 1919, when the operations were taken over by a Cyprian concern, which in turn gave place to the Cyprus Asbestos Company. (Editor's Note: According to our reference card the Cyprus Asbestos Company, Ltd., was incorporated in Cyprus October 1921 to develop business carried on by Cyprus Anonyme Asbestos Company). In the hands of this firm exploitation proceeded on more modern lines and production rose considerably, the output reaching a maximum of over 16,000 tons in 1928. Mining is by open-cast terraces, faces rising to a maximum of 250 feet. Much of the rock is weathered and amenable to the pick, but compressed-air rock drills were installed in 1927. Excavation work proceeds for the most part during the evening, so that the material may dry during the heat of the day prior to being milled.

"In order to facilitate transport, an aerial ropeway was built from the mines to the port of Limassol, a distance of about 19 miles in a direct line. Its capacity is 120 tons per day of 8 hours, and it is used not only for transporting asbestos but also for fuel, food and mine stores in the opposite direction.

"The company erected several small mills for extracting the fibre, each having a daily feed of 250 tons of broken rock, power being supplied by diesel-engine electric sets. The mill feed consists of material from the quarry passing an 18 mm. punched screen and retained on a 5 mm. wire screen. This amounts to about one-sixth of the total quarry output. In the mills it is crushed and passed over flat shaking screens, the fibre being recovered by air suction. This is further treated for removal of dust and then classified according to length. The fibre recovery in 1935 amounted to 5.85% of the rock treated. It is all short fibre and is graded into three classes: standard, shorts and fines. Probably three-quarters of the output consists of standard grade which is equivalent to shingle stock. During 1935, out of a total of ten primary mills only three were in operation during the season in addition to one fibre mill. Mill-

LIGHT DENSITY TYPE

PABCO

PRECISION
MOLDED

85% MAGNESIA INSULATION

"THE DEPENDABLE STANDARD—MODERNIZED"
REG. U. S. PAT. OFF.

U. S. Patent Nos. 2,131,374, 2,109,754,
2,206,753, 2,205,754

THE PARAFFINE COMPANIES, INC.
INSULATION DIVISION

Formerly Plain Rubber & Asbestos Works

475 Brannan Street
San Francisco 19, California

ENGINEERING UNITS
IN PRINCIPAL CITIES



ing is possible only during the dry season.

"The product of the Cyrus mines is suitable mainly for the production of asbestos-cement manufactures, for which purpose it is exported. In view of increasing competition from Russia and other sources, it became increasingly difficult to dispose of the output and in spite of a reorganization in 1931 the producing company found it impossible to continue to operate as an independent mining enterprise. Early in 1936 the company was acquired by the Tunnel Portland Cement Company, which has built an asbestos-cement products plant adjoining its cement plant at West Thurrock, Essex, England.

"In addition to the deposits of Amiandos, chrysotile is known to occur in the districts of Kakopetria and Trooditissa, and amphibole asbestos has been found in numerous localities, notably Vikla, Vasa and Apsou south of Ora, and near Episkopi in the Paphos district. No regular mining has taken place in any of these localities."

The Cyprus Asbestos Company or its distributing affiliate, the Cyrus Trading Corporation Ltd. of London, advertised in "ASBESTOS" during the period of February 1924 thru December 1932. It marketed and advertised only two grades in the early years, viz: Standard testing 0-0-14-2 and Shorts testing 0-0-5-11. Later it added Cyprus Fines described as a very short but clean fibre. The Standard grade was advertised "for the manufacture of highest class of asbestos shingles, flat and corrugated sheets."

In any case Cyprus mines do not produce any long fibre, the highest grade being that used for the manufacture of asbestos-cement products.

Follows the recorded production figures from 1906 to 1947 inclusive:

	Tons (2000 lbs.)		Tons (2000 lbs.)
1906	19	1916
1907	79	1917	1,069
1908	465	1918	228
1909	154	1919	1,331
1910	435	1920	896
1911	714	1921	897
1912	769	1922	2,248
1913	1,164	1923	1,812
1914	246	1924	3,467
1915	1,099	1925	3,607

	Tons (2000 lbs.)			Tons (2000 lbs.)	
1 26	6,940	1937		13,079	
1 27	12,544	1938		6,330	
1 28	18,241	1939		10,991	
1 29	15,791	1940		10,663	
1 30	7,947	1941		5,373	
1 31	1,273	1942		3,448	
1 32	1,700	1943		1,307	
1 33	3,904	1944		2,186	
1 34	7,592	1945		3,445	
1 35	8,392	1946		6,606	
1 36	10,306	1947		8,389	

AUTOMOBILE SALES

	December 1948	Year 1948
Passenger Cars	378,455	3,909,270
Motor Trucks	107,702	1,363,856
Motor Coaches	824	12,299
	486,981	5,285,425

Sales for the year 1947 were 4,797,922. These figures cover only cars made in the United States.

Sales in 1948 were second highest in the industry's history being exceeded only by 1929 when factory sales amounted to 5,358,420 motor vehicles.

A later report gives sales for January 1949 as follows:

	January 1949
Passenger Cars	326,019
Motor Trucks	104,607
Motor Coaches	658
	431,284

The above information is supplied by the Automobile Manufacturers Association. New Center Building, Detroit 2, Mich.

STEEL MANDRELS

For Asbestos Cement Pipe Making Machines
 Any Diameter — Quick Deliveries
"DURITE TECNICA" — TRIEST, Canava 24
 Tel. address DURITE

MARKET CONDITIONS

GENERAL BUSINESS

Demand in many lines has slackened, several factors being responsible. In the first place people have been able to fill their most pressing needs; in some lines such as coal and oil, the mild winter is responsible; and dealers and distributors are buying cautiously not wishing to have large stocks when prices may drop.

ASBESTOS - RAW MATERIAL

An ease-off in some lines of asbestos products, notably asbestos-cement materials, millboard, friction materials and floor tile, has caused the supply of certain grades of fibre to approach the demand, but the strike of the asbestos miners in Canada, which began the week of February 14th, is causing considerable loss in fibre production, and this, coupled with the expected seasonal spring upswing in demand will no doubt again create a backlog of considerable magnitude.

ASBESTOS - MANUFACTURED GOODS

Asbestos Textiles. Cloth and tapes have shown a slight increase in orders since last month, but there has been a considerable slackening of roving orders. Yarns and laps have shown little change.

Prices seem to be holding but regardless of the Government's future stockpiling, a definite slackening of asbestos textile business is reported.

Brake Lining. In this part of the industry warehouse jobbers business is off 10 to 25%. Apparently stocks are too heavy for present market conditions. This is undoubtedly just retrenchment; business outlook is still on the firm side.

Asbestos Paper. Demand in 1949 will be below 1948; the backlog of orders is diminishing rapidly. One correspondent reports that while he can make better deliveries than formerly, his production must still be allocated.

Manufacturers of *saturated paper* report good demand, prices stable, but believe that production will be able to

ACE ASBESTOS MANUFACTURING CO.



Importers, Exporters, Processors of
Asbestos Fibres of All Varieties

of
RAW ASBESTOS

for
Every Use

•
CHRYSOTILE
AMOSITE
AMPHIBOLE FIBRES

originating in
U. S. A. (ARIZONA)
CANADA
RUSSIA
CHINA
INDIA
RHODESIA
SOUTH AFRICA

•
Large Capacity Fiberizing and
Grading Plant

451 Communipaw Ave.

Jersey City, N. J.

take care of demand during the present year.

Asbestos Millboard. This market indicates that 1949 volume will be below that of 1948, even tho the demand is fairly steady.

Insulation. High Pressure. Volume is reported as definitely down altho backlog of orders will keep plants operating at near capacity for the next six months. Outlook for the latter half of 1949 is less favorable.

Insulation. Low Pressure. 1949 will show less business than 1948, principally because of decline in home construction. Jobber business is reported as slow.

Asbestos-Cement Products. Demand for roofing and siding shingles continues substantially less than a year ago and for the first time in several years appears to be on a seasonable basis. Manufacturers and buyers, however, are optimistic with regard to the spring and summer months and it is believed that the Industry will again find itself unable to meet requirements when the busy months arrive. Unfortunately, production lost during the winter cannot be made up and the year's total sales will suffer accordingly.

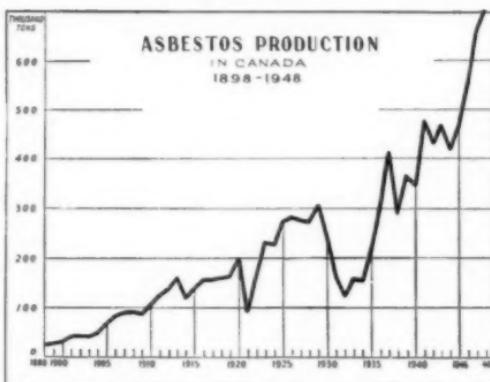
The production of Corrugated and Flat sheets is keeping pace with orders, there being very little backlog, but undoubtedly manufacturers will sell 1949 production easily.

As to pipes the report is of continued strong demand, altho there is evidence of deferment of projects because of high construction costs. The backlog is lower than a year ago but still represents many months of production.

The above represents the combined opinions of executives closely in touch with the several markets. Your comments are always welcome.

CANADIAN PRODUCTION - 1898 TO 1948

The Dominion Bureau of Statistics, Ottawa, has recently issued its Preliminary Report on Mineral Production of Canada 1948, and the page or two devoted to asbestos gives the graph reproduced below. Note this covers from 1898 to date in 5 year periods.



We give the last five years of the table accompanying the graph, which shows the figures for production and exports. Note that the figures for 1948 cover only 10 months instead of twelve.

Year	Production		Exports	
	Tons	Crude Tons	Milled Fibres Tons	Waste, Refuse or Shorts Tons
1944	419,265	\$20,619,516	1,541	181,668
1945	466,897	22,805,157	863	209,765
1946	558,181	25,240,562	639	215,233
1947	661,821	33,005,748	953	223,692
1948 ¹	707,843	41,318,118	711	190,734

¹Only 10 months, instead of twelve.

COMPLETE PLANTS

for making PRESSURE PIPES and CORRUGATED SHEETS
Plants designed, equipped and started. Short deliveries.
Our Engineers have had thirty years' experience in making
Pipes and Asbestos-Cement sheets.

DURITE TECNICA - Via Cavana 24, TRIESTE, ITALY
Cable address: Durite - Trieste



PRODUCTION STATISTICS

Canada

(Department of Mines, Province of Quebec)

Production for December 1948	58,400 tons (2000 lbs.)
Compared with December 1947	57,372 tons (2000 lbs.)
<i>By Grades—All tons 2000 lbs.</i>	
Crudes	Year 1948 944 tons 958 tons
Fibre	240,626 tons 222,197 tons
Shorts	473,146 tons 438,666 tons
	714,716 tons 661,821 tons

Africa (Rhodesia)

(Published by Rhodesia Chamber of Mines)

Production for October 1948	5,379.43 tons (2000 lbs.)
Valued at	£217,448
Production for November 1948	5,551.44 tons (2000 lbs.)
Valued at	£215,735
Africa (Swaziland)	
Production for November 1948	2,600 tons (2000 lbs.)
December 1948	2,600 tons (2000 lbs.)
Total production for 1948	was 30,500 tons compared with 28,985 tons in 1947.

BUILDING - Sharp Break in Building Contracts

Contracts awarded for building and heavy engineering projects in the 37 states east of the Rocky Mountains in January showed a sharp break from the volume reported in December and in January of last year, as reported by the F. W. Dodge Corporation.

The total contract volume in January was \$482,984,000. This was 31% less than that reported in December and 22% lower than the volume reported in January of last year.

The decline was especially pronounced in residential and heavy engineering awards, the total residential contract volume being \$159,128,000 (38% less than December). Heavy engineering contracts totaled \$101,973,000, or 40% less than December.

WANTED

Position as production Supt. or Manager of Asbestos Cement Products Plant. Twenty-five years experience in the manufacture and finishing of siding and roofing shingles, asbestos lumber, clapboard, interior or exterior wallboards. Write Box 38-W, "ASBESTOS", 17th Fl., Inquirer Bldg., Phila., 30, Pa.

JOHNSON'S COMPANY LTD.

ESTABLISHED IN 1875

Head Office

Thetford Mines, P. Q. Canada

Mines

Thetford Mines, Quebec
Black Lake, Quebec



Producers of All Grades of
RAW ASBESTOS



REPRESENTATIVES

GREAT BRITAIN	A. A. BRAZIER & CO. "Avenue Lodge" 65a Bounds Green Road, LONDON, N. 22, England.
CHICAGO 4, ILL.	GRANT WILSON, INC. 141 West Jackson Boulevard
NEW YORK, N. Y.	CONNELL ASBESTOS MFG. CO. 117 Martense Street, Brooklyn, 26, New York
SAN FRANCISCO, CALIF.	LIPPINCOTT CO., INC. 461 Market Street



IMPORTS AND EXPORTS

Imports into U. S. A.

(Figures by Bureau of Census)

Unmanufactured Asbestos—By Countries

November 1948

Tons (2240 lbs.)

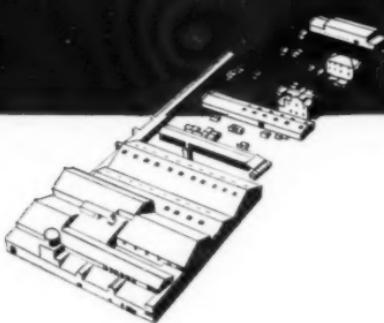
From Canada	52,674
S. Rhodesia	177
Union of S. Africa	1,135
Mozambique	237
U. S. S. R.	1,827
Bolivia	21
China	2
	56,073
Value	\$3,755,574

By Grades:

Crude No. 1 (Chrysotile)	
S. Rhodesia	40
Crude No. 2 (Chrysotile)	
S. Rhodesia	112
Union of S. Africa	418
Crude—Other (Chrysotile)	
Canada	7
S. Rhodesia	25
U. S. S. R.	1,827
Crude—Blue	
Bolivia	21
Union of S. Africa	352
Crude—Amosite	
Union of S. Africa	365
Mozambique	237
Textile Fibres—Chrysotile	
Canada	2,000
China	2
Shingle Fibres—Canada	7,511
Paper Fibres—Canada	5,788
Fibres—Short Grades—Chrysotile, Canada	37,368
	56,073

ASBESTONE CORPORATION

Manufacturers
Asbestos-Cement
Building Products



FACTORY AND SALES OFFICE
5372 TCHOUPITOULAS ST., NEW ORLEANS, LA.

November 1948		
<i>Manufactured Asbestos Goods:</i>	Quantity (Lbs.)	Value
Asbestos Yarn—United Kingdom	5,445	\$ 4,503
Asbestos Packing—Fabric		
United Kingdom	403	538
Asbestos Packing—Not Fabric		
United Kingdom	2,085	1,368
Asbestos Woven Fabrics—Other		
United Kingdom	880	678
Asbestos Brake Lining—Molded		
Canada	3,310	2,291
Asbestos Cement Products—Impregnated		
Canada	49,962	1,667
Asbestos Cement Products—Not Impreg.		
Canada	504,690	43,374
Asbestos Manufactures—Other		
Canada	9	
United Kingdom	444	
	566,775	\$54,872

Exports from U. S. A.		
	November 1948	
	Tons (2240 lbs.)	Value
<i>Unmanufactured Asbestos</i>		
To Mexico	5	\$ 893
Cuba	31	1,540
France	90	34,000
Sweden	31	1,575
Philippine Is.	16	1,170
Curacao	88	7,426
Germany	90	6,820
	351	\$53,424

<i>Manufactured Asbestos Goods:</i>	Quantity	Value
	Lbs.	
Asbestos Paper, Mlbd., Rlbd.	77,746	\$ 5,062
Asbestos Pipe Covg. & Cement	Lbs. 205,878	14,997
Asbestos Textiles and Yarn	Lbs. 8,721	6,561
Asbestos Packing	Lbs. 148,360	105,279
Asbestos Brake Lng. (Mld.&S.Mld.)	Lbs. 136,998	119,432
Asbestos Brake Lng. (Woven)	L. Ft. 24,639	17,120
Asbestos Clutch Fcgs. (Mld.&S-Mld.)	No. 67,587	28,069
Asbestos Clutch Fcgs. (Woven)	No. 33,213	12,598
Asbestos Brake Blocks (M.&S.Mld.)	Lbs. 9,961	12,443
Asbestos Brake Blocks (Woven)	Lbs. 2,224	3,060
Asbestos Sheets	Lbs. 657,692	39,116
Asbestos Roofing	Sqs. 6,546	51,533
Other Asbestos Manufactures		67,750
		\$483,020

ASBESTOS FIBRE SHINGLE GRADES

A NEW MODERN ASBESTOS PLANT
WITH REVOLUTIONARY EQUIPMENT

Your inquiries are invited.



ASBESTOS FIBRES, INC.

Preparation Plant:

33 AVENUE P, NEWARK, N. J.

Main Office:

56 CRITTENDEN ST., NEWARK, N. J.

NEWS OF THE INDUSTRY

BIRTHDAYS

E. W. Smith, Vice President and Director of Sales, Philip Carey Mfg. Co., Lockland, Cincinnati, Ohio, March 17th.

John H. Balch, Vice President, Treasurer and Director, Union Asbestos & Rubber Co., Chicago, Ill., March 22nd.

Paul G. Charbonnet, Vice President, Asbestone Corporation, New Orleans, La., March 23rd.

A. R. Fisher, Vice President, Johns-Manville Corp., New York City, March 27th.

J. A. O'Brien, Vice President, Johns-Manville Sales Corp., New York City, March 28th.

F. V. S. Smith, Director and Secretary, Hodgson & Hodgson Ltd., Carrington, Nottingham, England, March 29th.

W. C. Bowman, District Manager, Philip Carey Mfg. Co., Philadelphia, Pa., March 30th.

George E. Grimshaw, Adviser on Industrial Insulation, M. W. Kellogg, New York City, March 31st.

G. M. Williams, President, Russell Mfg. Co., Middletown, Conn., April 6th.

Herbert D. Harris, Asbestos Corporation of America, New York City, April 12th.

J. M. Weaver, Textile Research and Development Engineer, Raybestos-Manhattan, Inc., Manheim, Pa., April 14th.

Philip A. Meyer, Treasurer, Sall Mountain Co., New York City, April 16th.

P. O. Baker, District Manager, Asbestos Textile & Packing Division, Raybestos-Manhattan, Inc., Providence, R. I., April 18th.

Congratulations and best wishes to these gentlemen on the occasion of their birthdays.

CANADIAN MINING JOURNAL—Articles

The October issue of the Canadian Mining Journal, which features mining progress in the Province of Quebec, contains a brief article by A. L. Penhale, General Manager of Asbestos Corporation Limited, under the title "History of the Canadian Asbestos Mining Industry" and a longer one entitled "Asbestos Industry in Quebec" by H. R. Rice. The latter article is illustrated with graphs, maps, photographs and a generalized flow sheet of an asbestos mill. Both are worth reading. The Journal is published in Gardenvale, P. Q.

BLUE ASBESTOS

The Cape Asbestos Company, Ltd., is the world's largest supplier of acid-resistant blue crocidolite asbestos, and the only manufacturer operating its own mines. Inquiries solicited on:

MILLBOARD

YARNS

ROVINGS

POWDER

CLOTHS

PROCESSED FIBRES

Unexcelled for use in
ASBESTOS CEMENT PIPES

AMOSITE ASBESTOS

This fibre owing to its great length and bulk is unrivalled for use as an insulating medium in:

Asbestos mattress filler

85% Magnesia insulation

The **CAPE ASBESTOS CO.** Limited

Morley House, 28-30 Holborn Viaduct, London, E.C.I.

FACTORY, BARKING, ESSEX

United States Sales Agent:

ARNOLD W. KOEHLER

415 LEXINGTON AVE.

NEW YORK CITY

TELEPHONE—VANDERBILT 6-1477

THE MINE STRIKE IN CANADA

Negotiations toward renewal of Collective Work Agreements between the National Federation of Employees of the Mining Industry and four of the asbestos mining companies in the Province of Quebec were unsuccessful, and a conciliation officer was appointed by the Quebec Department of Labor to help solve the problems arising from negotiations.

The four companies involved are: Asbestos Corporation Limited, Johnson's Company, Flintkote Mines Limited, all at Thetford Mines, and Canadian Johns-Manville Company, Limited, at Asbestos.

Conciliation proceedings failed and all parties agreed to arbitration. Immediately thereafter, the employees of all four companies went on strike on February 14th. These strikes have been declared illegal by the Provincial Minister of Labor and the Certificate of Recognition of the Federation has been withdrawn by the Department of Labor.

The properties of Bell Asbestos Mines Limited at Thetford Mines were picketed by the strikers and work at that property suspended for one week from February 19th to February 26th, when operations were resumed. Operations of the Quebec Asbestos Mines at East Broughton and Nicolet Asbestos Mines at St. Remi are normal.

JAMES G. WARREN DIES Founder of Warren & Bailey

James Garfield Warren, founder of Warren & Bailey, of Los Angeles, died on February 12th, at the age of 88.

Mr. Warren was a poor farm boy, who educated himself. He went to Los Angeles in 1898 and until his death was active in almost every branch of the city's affairs.

The firm which bears his name actually originated in 1892 but upon Mr. Warren's association with it in 1898 the name was changed to Warren & Bailey.

Mr. Warren was always interested in helping young people, one of his more famous proteges being the baritone, Lawrence Tibbett.

A bit of history of interest to the readers of "ASBESTOS" is the story of how on a railroad trip in 1902, Mr. Warren talked to a young passenger, who happened to be R. B. Crabb connected with the Philip Carey Manufacturing Company. From that meeting developed the association of Warren & Bailey Company with Carey Company as distributors of Carey insulations, etc., in Southern California.

"THE MINING INDUSTRY OF THE PROVINCE OF QUEBEC IN 1946"

This publication has just reached us. It contains the usual information concerning production, shipments and exports, with descriptions of the various Canadian asbestos mining properties.

Royal Pipe Covering Protectors



Insure - Permanent - Economical
Protection To All Open Ends Of
Pipe Covering

SHIPPED FROM STOCK

THE PROTECTOR COMPANY

9 L. STREET

SOUTH BOSTON, 27, MASS.

SOCIEDADE TECNICA DE HIDRÁULICA, SARL—"CIMIANTO"

Producer of Asbestos-Cement Goods

Address — R. Joaquim António de Aguiar, 41-1°
Lisbon — Portugal

Cable Address — "CIMIANTO" — Lisbon

roofing, siding
and insulation



45 W. 45th St.

.... SURE
WAY....
of selling the
nation's
roofing,
siding and
insulation
contractors!

CANTOR
PUBLISHING CO.

New York 19, N. Y.

J-M REPORT FOR YEAR 1948

Consolidated net earnings of Johns-Manville Corporation in 1948 were \$15,440,475, or \$5.22 per share of common stock, compared with \$9,486,633 or \$3.23 per share in 1947.

The 1948 earnings were equivalent to 8.9 cents in the sales dollar.

Sales were at a new record level in 1948 (the 90th anniversary year) the total being \$173,458,033, compared with \$133,885,412 in 1947.

Before taxes of all kinds, 1948 earnings were \$28,083,217 which was \$10,404,312 more than in 1947. All taxes in 1948 amounted to \$12,642,742, including \$9,660,000 levied on United States and Canadian income.

Price increases in general were moderate, advancing during the year on the average of 9.6%.

Payroll in 1948 was \$66,063,575, compared with \$53,209,587 in 1947. Employment at the end of 1948 totaled 20,000.

Production of asbestos fibre from the Company's mines at Asbestos, Quebec, reached an all-time record, the output being 348,000 tons, compared with 305,000 tons in 1947. At the end of 1948 work required to change over from the open-pit method to underground mining was 75% completed.

Consolidated income account for the year, compared with 1947, is given below.

	1948	1947
Sales, less discounts and allowances	\$173,458,033	\$133,885,412
Mfg. cost, selling and admin. exp. etc.,		
ex. tax ^g	145,374,816	116,206,507
	28,083,217	17,678,905
Federal, state, local and Canadian taxes ..	12,642,742	8,192,272
Net earnings for the year	15,440,475	9,486,633
Dividends	6,069,516	4,249,510
Earnings of year reinvested in business ..	9,370,959	5,237,123
Prior earnings of sub. not previously		
consolidated	33,215	
Earnings reinvested as at beg. of year ..	30,096,446	24,859,328
Earnings reinvested as at end of year	\$ 39,500,620	\$ 30,096,446

ARTICLE—"85% Magnesia Insulation—Its Properties and Uses"

The Plumbing and Heating Journal, published in New York City, has an article in its January issue under the above title. The author is Utley W. Smith, Manager, The Magnesia Insulation Manufacturers Association.

SMITH & KANZLER CORPORATION

MANUFACTURERS OF

ASBESTOS PAPER

AND

**LOW PRESSURE
INSULATIONS**

ESTABLISHED 1920

LINDEN, NEW JERSEY

**ANNUAL REPORT
ASBESTOS CORPORATION LIMITED**

The annual report for the year ending December 31, 1948 shows a net profit, after charging all expenses, including taxes, but before depreciation, of \$1,708,941. The sum of \$474,029 was set aside for depreciation, leaving a balance of \$1,234,912, compared with \$1,324,655 in 1947. Profit and Loss statement follows:	
Profit from Operations	\$2,221,571.26
Interest on Investments	71,183.36
Miscellaneous Revenue	92,490.36
	2,385,250.98
Less Executive Salaries	\$ 61,900.00
Legal Fees	4,078.20
Directors Fees	8,060.00
Exploration and prospecting exp.	16,271.34
Provision for depreciation	474,029.32
Contr. to Pension Trust Fund	75,000.00
	639,338.86
Provision for Dominion and Provincial Taxes	1,745,912.12
	586,000.00
	1,159,912.12
Appropriation for extensions and improvements
Earned surplus Dec. 31, 1947	\$1,369,993.61
Recovery on foreign accounts receivable previously written off less taxes thereon	32,654.81 1,402,648.42
	\$2,562,560.54
Dividends (Regular and Extra)	960,000.00
Earned surplus, December 31, 1948	\$1,602,560.54

**EXPANSION PROBLEMS IN HEAT
INSULATION OF PROCESS VESSELS**

An article under the above title appeared in the February 1949 issue of *Petroleum Refiner*, published by the Gulf Publishing Co. The article was written by Elbert R. Sitton, Insulation Consultant, 1211 Elm Place, Houston 8, Texas.

Mr. Sitton plans to have reprints made of the article and will be glad to send copies (at 20c each) to anyone making requests direct to him at the above address.

The article is illustrated with numerous drawings and should be of especial interest to those who sell and apply insulation in the oil fields.

**THE RUBEROID CO.
New Dry Felt Mill**

A new dry felt mill is being erected on property adjoining the Ruberoid Co.'s asbestos and asphalt roofing mills on Emogene Street, Mobile, Ala. Upon completion the new mill will have an annual capacity of approximately 15,000 tons of dry felt and will increase the total number of Ruberoid employees at Mobile to about 600.

48
es,
as
n-
s:
26
36
36
98

CANADIAN JOHNS-MANVILLE
Strike Closes Mine, Mill and Plant

The operations of Canadian Johns-Manville Company, Ltd., at Asbestos, Quebec, have been shut down since midnight, February 3, when leaders of the Asbestos Syndicate of the National Federation of Mining Industry, Inc., representing the 2100 employees in the company's mine, mill and plant, without warning, called a strike. Picket lines formed shortly after the strike went into effect and on February 18, the management of Canadian Johns-Manville was denied any access to company offices.

Canadian Johns-Manville sought and received an injunction against this illegal picketing and on February 19, Provincial police were sent in by the Quebec government to maintain law and order.

Under the laws of Quebec Province, the strike of the Canadian Johns-Manville workers was illegal, and on February 21 when union leaders insisted on continuing the strike, the Provincial Labor Relations Board withdrew the Union's certification and cancelled the right of the union to represent the Canadian Johns-Manville employees, and their other rights under Quebec Labor laws. At the time the strike was called company and union representatives had agreed to plans for submitting points under discussion in contract renewal negotiations to arbitration as required by Quebec law. The contract between the company and the union expired January 31, 1949.

The principal union demands include: an increase of 15 cents per hour to a minimum base rate of \$1.00 per hour; a contribution by the company of 3% of the gross payroll to the Federation as a social security fund; a five cent night bonus; nine paid holidays and added vacations without pay. Other matters under discussion dealt with the Union's seniority demands, the so-called "Rand Formula" and rights of management.

Canadian Johns-Manville officials said that the real issue in the strike is the aim of the union's leaders to tie up the entire asbestos industry in Canada with industry-wide bargaining. The Federation had attempted earlier to get the Quebec Provincial Department of Labor to establish an industry-wide court of arbitration.

The big asbestos mine in Canada services nearly all of the 20 J-M plants throughout the United States and Canada. Company officials in New York state that a good supply of asbestos fibre is on hand at each J-M. fabricating plant, and that no curtailment of production in the immediate future of any of the plants affected was anticipated.

Status of the strike remained unchanged at the close of the day, Thursday, March 10th, when "ASBESTOS" went on press.

UNARCO PURCHASES TEXAS PLANT

Union Asbestos & Rubber Co. has purchased a part of the former Bluebonnet ordnance plant at McGregor, Texas, from the War Assets administration. The acquisition, consisting of approximately 75,000 square feet of manufacturing space and 125 acres of land, will be used principally to make high temperature insulations. Some machinery for the new plant has already been shipped and manufacturing operations will be started as soon as possible.

J. B. Crawford, formerly plant manager at the Cicero, Ill., plant has been appointed manager of the new plant at McGregor.

When fully in production this new plant is expected to add substantially to the volume of asbestos products already being manufactured in the company's plants in Cicero and Earlville, Ill., Paterson, N. J., and Davidson and Marshville, N. C.

VICTOR MFG. & GASKET CO.

George E. Victor Made President

At the December board meeting of Victor Manufacturing & Gasket Co., Chicago, George E. Victor was elected President, succeeding his father, John H. Victor, who founded the company in 1909 and who continues actively in the business as chairman of the board.

The new President has participated in the company's management in various capacities for the past 10 years with the exception of his war service. He enlisted as a private in the Ordnance Department in 1942 and was discharged as a captain in 1945, at which time he was appointed executive vice president of the firm.

Also in the business is another son of the founder, William F. Victor, who is executive vice president in charge of the recently opened Victor plant No. 5, which provided substantially increased production facilities and permits exceptionally rapid and efficient handling of orders.

THE RIC-WIL COMPANY

Issues Two Booklets

"Engineering Data for Underground Steam Distribution, Section 480-2," dealing with such subjects as the layout of the route, methods of estimating loads, steam flow charts and tables and other related topics has just been issued by The Ric-wil Company, manufacturers of insulated pipe conduit systems. A second booklet available from the same company is "Typical Engineering Drawings—Section 480-3" which reproduces actual drawings used in a wide variety of insulated piping installations.

Write The Ric-wil Company, Dept. A23, Union Commerce Bldg., Cleveland, Ohio, if interested.

INDUSTRIAL SERVICE COMPANY

Builders of

ASBESTOS CEMENT MACHINERY

Our experienced engineers and machinists offer the industry entire machines built to deliver maximum production.

Your Inquiries Are Invited

151 Paterson Avenue

E. Rutherford, N. J.

ASBESTON *

Light-weight • High-strength • Low-gauge
Asbestos Fabrics — Asbestos Tape

Textile Division

UNITED STATES RUBBER COMPANY

1230 AVENUE OF THE AMERICAS, NEW YORK 20, N. Y.

*Reg. U. S. Pat. Off.



TEST

... the added sales volume
awaiting you among the
nation's roofing and siding
contractors. Write to . . .

AMERICAN ROOFER and SIDING
CONTRACTOR
425 Fourth Avenue, New York City

GARLOCK PACKING CO.
Moves Philadelphia Office

The Garlock Packing Co. announces the removal of its Philadelphia Office and warehouse to 2514-18 North Broad Street. Their zone number is 32.

ASBESTOS CONTRACTORS' NEW ENGLAND ASSN.
Elects Officers

At the annual meeting of the Asbestos Contractors' New England Association held March 3, 1949, at the Engineers Club, Boston, Mass., the following officers were elected:

President: Kenneth C. Bond, of New England Insulation Co.; Secretary-Treasurer (re-elected): John J. Roper, of Armstrong Cork Co.; Executive Committee: Thomas R. Nunan, of Armstrong Cork Co.; Olaf M. Johnsen, of Olaf M. Johnsen Co.; John Mullen, of Curtis Asbestos Co.; George Hinman, of Hinman Asbestos Co. (Alternate). These last named four men will also serve on Joint Trade Board Committee and Apprenticeship Committee.

PATENTS

This information obtained from the Official Patent Gazette, published weekly by the U. S. Patent Office, Washington, D. C.

Copies of patents can be obtained by sending 25c (in coin) to The Commissioner of Patents, Washington, D. C., giving the patent number, date it was issued, name of patentee and name of invention.

Asbestos Fiberizing. No. 2,459,240. Granted on January 18, 1949 to Lee C. Pharo, Thetford Mines, Que., Canada, Assignor to Johnson's Company, Thetford Mines, West, Que. Application October 12, 1943. Serial No. 505,999.

An Asbestos fiberizing apparatus comprising, a plurality of sets of rolls aligned to act successively on masses of asbestos during their passage thru the apparatus, each set including a pair of companion rolls comprising interfitting longitudinal extending ribs and grooves, each set also including an alternate pair of companion rolls presenting interfitting circumferential extending ribs and grooves, there being such sets of rolls wherein the distance on the surfaces of the rolls between the apices of adjacent ribs is about 2-1/2 inches and the ribs and grooves are effective to flex the longest spicules without injury to the fibre, succeeding sets of rolls having a distance on the surfaces of the rolls between the apices of adjacent ribs of about 1-1/2 inches whereby the ribs and grooves are effective to flex fibres of intermediate length without injury to the longer fibres and finally sets of rolls having a distance on the surfaces of the rolls between the apices of adjacent ribs to about 1/2 inch whereby the rolls are adapted to flex fibres of the shortest length without injury to the longer or intermediate fibres.

ASBESTOS STOCK QUOTATIONS

These figures are compiled from the Commercial and Financial Chronicle. No guarantee as to their correctness.

February 1949

	Par	Low	High	Last
Armstrong Cork (Com.)	np	43 1/2	47 1/2	45 1/2
Armstrong Cork (Pfd.)	np	97 1/2	99 3/4	98 1/4
Armstrong Cork (Conv. Pfd.)	np	108	110 1/2	108
Asbestos Corp. (Com.)	np	23	25 1/2	23 1/2
Asbestos Mfg. Co. (Com.)	1	1 1/8	1 1/4	1 1/8
Celotex (Com.)	np	20 3/4	24 1/2	21
Celotex (Pfd.)	20	17 1/8	18 1/2	17 1/2
Certainteed (Com.)	1	10 3/4	12	11 1/2
Flintkote (Com.)	np	24 5/8	26 3/4	25 1/4
Flintkote (Pfd.)	np	97 5/8	100 1/2	100
Johns Manville (Com.)	np	36 1/4	39 3/4	36 5/8
Johns Manville (Pfd.)	100	107	112	110 1/2
Paraffine (Com.)	np	16 5/8	18 1/8	18
Paraffine (Pfd.)	100	102 1/2	105	104
Ray-Man (Com.)	np	26	29	26 1/4
Ruberoid (Com.)	np	48 3/4	55	51
Thermoid (Com.)	1	5 1/4	6 1/4	5 1/4
Thermoid (Pfd.)	50	35	37 1/4	35 1/2
Union Asb. & Rub. (Com.)	5	10 5/8	12	11 1/4
United Asbestos (Com.)	1	80c	\$1.24	96c
U. S. Gypsum (Com.)	20	97	102 3/4	100
U. S. Gypsum (Pfd.)	100	175	179	178
U. S. Rubber (Com.)	10	38 1/8	41 3/4	39
U. S. Rubber (Pfd.)	100	125 3/4	129 1/2	128

PATENTS—(Continued)

Manufacture of Structural Shapes. No. 2,459,685. Granted on January 18, 1949, to Arthur B. Cummins, Plainfield, N.J. Assignor to Johns-Manville. Application May 3, 1944. Serial No. 533,971.

A method of manufacturing hard microporous shapes which are substantially volume stable at temperatures below 1500° F. which comprises forming crystalline hydrous magnesium silicate by reacting magnesia and finely divided microporous silica in the molal ratios of 1-2-3 and in the presence of water, forming a stiff aqueous paste of the resulting finely divided hydrous magnesium silicate, molding said paste under pressure and finally drying the resulting shape and firing it to a temperature of at least 1500° F.

AFTERTHOUGHTS

¶ Mr. Lewis H. Brown, Chairman of the Board of Directors of Johns-Manville, in the annual report to stockholders, states that continued research and development have produced methods which obtain a higher recovery of asbestos from the ore-bearing rock. In 1928 the recovery was less than 8%—in 1948 it was nearly 13%, the increase coming largely in the shorter grades of fibre for which important commercial uses have been developed.

¶ Chemical Processing Preview, February 1949 issue (it's published at 737 N. Michigan Ave., Chicago, Ill.) calls attention to an *aluminum foil suit* which has been designed for use by fire fighters—made of aluminum foil backed with safety fiberglas and sewed with fiberglas thread. Said to weigh only three pounds. Tested along with other types of fire fighting suits, it has been found to offer "great protection and comfort."

¶ The Department of Commerce is preparing a 1949 edition of "Market Research Sources" (last published in 1940). You will probably receive a questionnaire to fill out. Further information can be obtained by writing Marketing Division, Department of Commerce, Washington, D. C., or contacting the nearest Department field office.

¶ Englewood, N. J., is to be a test town for the basic building code prepared by the Building Official Conference of America, Inc.

¶ Continuous-flow laboratory tests extending over a 10-year period have been made on a number of materials such as wrought iron, cast iron, copper bearing steel, etc., with the idea of providing comprehensive data on the relative corrosion resistance of commercial pipe materials to cold flowing water. Further details may be obtained from the National Bureau of Standards, U. S. Department of Commerce, Washington 25, D. C.

¶ We are very happy to present in this issue an editorial by Oliver Bowles, formerly with the U. S. Bureau of Mines at Washington, but now retired. See page 4.

BOOK LIST

The Asbestos Factbook, 16 pages. Information in compact form on origin, facts, locations, uses, analyses, qualities, 10c per copy.

Asbestos Mining Methods. By C. V. Smith. (Reprint) 16 pages. 25c per copy.

Milling Asbestos. By J. C. Kelleher. (Reprint) 16 pages. Companion article to Asbestos Mining Methods. Both should be in every Asbestos Library, 25c per copy.

Recovery of Raw Asbestos. By Roland Starkey. (Reprint) 6 pages. Supplement to Milling Asbestos. 25c per copy.

Canadian Chrysotile Asbestos Classification. Including latest Quebec Testing Method. January 1, 1949 Edition. 4 pages. 25c per copy.

Processing Asbestos Fibres. 8 pages. (Reprint) 25c per copy

Test for Cotton Content. 4 pages (Reprint) Describing several methods of testing asbestos textiles for cotton content. 10c per copy.

Chart—Dollars Cost of Uninsulated Pipe. (Reprint) 20c each

Twelve Estimating Tables, with Chart. Convenient in figuring flange fittings and other areas. \$1.00 per set.

Manual of Unit Prices (for figuring pipe covering and blocks) 35c per copy postpaid.

Asbestos: A Magic Mineral, by Lilian Holmes Strack. Written for school children but should be in every Asbestos library. \$1.00 per copy.

Asbestos—The Silk of the Mineral Kingdom, by Oliver Bowles. 40 pages about asbestos, from mine to finished product, in plain language, illustrated, 25c a copy.

Order any of the above from "ASBESTOS", 17th Fl., Inquirer Bldg., Philadelphia 30, Pa. Postage stamps acceptable for amounts less than \$1.00.



For Asbestos Packings

RUBBER & ASBESTOS CORP.
25 CORNELISON AVENUE
JERSEY CITY 4, N. J.

CURRENT RANGE OF PRICE

As of March 10, 1949

Canada—

	Per Ton (2000 lbs.) f.o.b. Mine
Group No. 1 (Crude No. 1)	\$960.00 to \$1,050.00
Group No. 2 Crude No. 2; Crude Run-of-Mine and Sundry	400.00 to 550.00
Group No. 3 (Spinning Fibre)	232.00 to 42.00
Group No. 4 (Shingle Fibre)	95.50 to 141.00
Group No. 5 (Paper Fibre)	78.50 to 88.00
Group No. 6 (Waste, Stucco or Plaster)	58.00
Group No. 7 (Refuse or Shorts)	28.00 to 52.00

Vermont—

	Per Ton of 2000 lbs. f.o.b. Hyde Park or Morrisville, Vt.
Group No. 4 (Shingle Fibre)	\$111.50 to \$124.00
Group No. 5 (Paper Fibre)	79.00 to 96.50
Group No. 6 (Waste, Stucco or Plaster)	59.00
Group No. 7 (Refuse or Shorts)	28.50 to 52.50

Note: Crude Run-of-Mine (Canadian) refers to a crude asbestos produced in certain mines where Crude Fibre is not graded into regular No. 1 and 2 Crude. Crude Sundry refers to certain odd lots of off material which do not conform to the regular standards of No. 1 Crude or No. 2 Crude.

USES OF ASBESTOS PAPER

In the January issue of the Paper & Twine Journal, published in New York, definitions of various terms used in the Paper Industry are given. It defines "Asbestos Paper" as "a sheet of asbestos fibres, formed on a cylinder machine in various thicknesses. A small amount of sizing is usually added. Used as an insulating material and fire retardant between floors, walls and ceilings, also for packaging inflammable materials such as matches."

Hardly adequate, so far as the uses of Asbestos Paper are concerned. We have sent the editor of the Paper & Twine Journal The Asbestos Factbook, and have called his attention to the many and far more important uses of this product.



EHRET'S VALLEY FORGE PACKINGS

Standardization by EHRET packing experts has produced a line of packings that has been held to a minimum number of items consistent with service, economy and good practice. Dealers and Distributors can materially reduce inventories and, at the same time, maintain stocks to cover a broad range of service requirements.

Details of the Ehret line of Valley Forge Packings are contained in a packing service manual. A copy will be sent to you on request.

**EHRET MAGNESIA
MANUFACTURING COMPANY**
VALLEY FORGE • PENNSYLVANIA

SOUTHERN ASBESTOS

ASBESTOS CLOTH

Southern weaves a complete range of Asbestos Cloth. A large number of Standard and Special Cloths available in all styles, textures, grades, weights and thicknesses are shown here.

Our Textile Engineers and Research Department are continually developing specialized Asbestos Cloth and exploring new uses for our present cloths. Their service is available to you. Write for Bulletin No. 1004.

A COMPLETE LINE OF ASBESTOS TEXTILE PRODUCTS

THREAD • CORD • ROVING • TUBING
CARDED FIBRE • LISTING TAPE
YARNS • ROPE • OIL BURNER WICK

Southern Asbestos Company has over 25 years of specialized experience in developing and manufacturing Asbestos Textiles and Textile Products. Its technical and production facilities are available to help solve your problems involving asbestos fibre and textiles.

